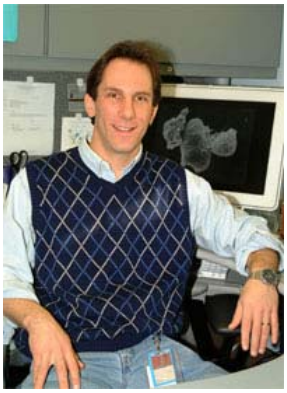
NCI-Frederick
Animal Care & Use
May 2005

Newsletter Contents

ACUC Member Spotlight



Dr. Andy Hurwitz

Dr. Hurwitz received his Ph.D. from the Albert Einstein College of Medicine in 1994, where he studied the role of the blood-brain barrier in HIV infection of the central nervous system (CNS) with Drs. Bill Lyman and Joan Berman. He continued his training at UC Berkeley as a Postdoc with Dr. Jim Allison. His studies were on the role of T cell costimulatory signals in modulating anti-tumor and autoimmune responses. In 1999, Dr. Hurwitz was appointed Assistant Professor of Microbiology and Immunology and Urology at SUNY Upstate Medical University in Syracuse, NY. His research program moved to the CCR in 2003, where he continues to study T cell tolerance to antigens relevant in anti-tumor immunity and autoimmune disease in animal models. He maintains an Adjunct appointment at SUNY Upstate Medical University. Dr. Hurwitz joined the ACUC in 2004 to participate in the comprehensive, uniform, and equitable review of animal study proposals and to assist in compliance with Federal guidelines.

Revised and New ACUC Guidelines

The ACUC has recently adapted the following revised and new guidelines. Please ensure that you and your staff review these guidelines and incorporate as they apply to your research study.

- *Guidelines for Euthanasia of Rodents*
- *Guidelines for the Skin Painting of Mice*

These guidelines can be found at the following site: **http://web.ncifcrf.gov/rtp/lasp/intra/acuc/fred/guidelines_nci.asp**

Revised Animal Study Proposal Form

The ACUC has recently revised the NCI-Frederick Animal Study Proposal form to include (1) hyperlinks to pertinent guidelines and recommendations; (2) to address Technology Transfer Branch requirements; (3) to include information pertaining to service-oriented proposals; and (4) to incorporate standard pre-review requests into the text of the form. Investigators are reminded that they should refer to the ACUC website to ensure that they are using the most recent version of the ASP form prior to submission. The new form can be found at (revision date of April 2005) **http://web.ncifcrf.gov/rtp/lasp/intra/acuc/fred/download.asp?f=proposal**

ACUC Training Course

The NCI-Frederick ACUC will be presenting its semiannual lecture training course *"The Care and Use of Animals in Laboratory Research"* on June 16 at 9:00 a.m. in the Building 549 Auditorium. This course focuses on animal welfare, ethics, Animal Study Proposal submission, veterinary care, facility and LASP resources, and safety requirements. The NCI-Frederick ACUC will not approve an Animal Study Proposal unless all individuals listed to work with live animals have fulfilled training requirements. Any individuals that have only taken the online introductory training course to date must also attend this course at least one time to fulfill requirements. Pre-registration is required.

Please contact the **ACUC Office** to register for this course or if you have any questions.

Transport of Live Animals to Lab Locations

For various reasons an investigator may require transportation of animals from an NCI-Frederick animal facility to his/her laboratory (in Frederick or Bethesda) for terminal procedures, etc. This is a standard practice at the NCI-Frederick and is permissible as long as the investigator has (1) included the request to transport animals to the location in the approved animal study proposal; and (2) ensures compliance with approved policies and procedures for transport. If you currently do not have transportation to laboratories (NCI-

NCI-Frederick Animal Care and Use Links

Home Page
Guidelines and Recommendations
Alternatives
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Forms

The ACUC is always interested in new members to assist the committee. If you are willing to volunteer as an ACUC member or to participate in any of its subcommittees, please contact the **NCI-Frederick ACUC Office**

Regulations and Policies Links

Animal Welfare Act
Public Health Service Policy
Guide for the Care and Use of Laboratory Animals
U.S. Government Principles

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Frederick or Bethesda) included in your approved Animal Study Proposal, please contact the **ACUC Office** for guidance. The addition of this request can be handled by the ACUC Office expeditiously without impeding transportation requirements. Thank you for your cooperation!

In Vivo Fluorescent Imaging Program

The Laboratory Animal Sciences Program is providing an in vivo fluorescent imaging service that utilizes the Maestro 420 In-Vivo Spectral Imaging System (Cambridge Resources and Instrumentation, Inc.) in Building 571. This is a self-contained instrument that includes a xenon light source to incite the fluorescence and a charge coupled device camera to collect the digital images. The Maestro imaging unit is connected to a computer equipped with specially designed software (Nuance Technology) to distinguish or unmix images of fluorescence from multiple sources. LASP has initiated the In Vivo Fluorescent Imaging Program to provide NCI investigators with a visible noninvasive method for real-time tracking of tumor cells and metastases. Fluorescent imaging also has great utility in the tracking of gene expression, viruses, and embryonic development, among other things.

For additional information, please visit the In Vivo Imaging website at **http://web.ncifcrf.gov/rtp/lasp/intra/forms/imaging/** or contact **Dr. Heather Narver**.

Basic Methodology for Laboratory Mice

The National Human Genome Research Institute Office of Laboratory Animal Medicine has developed a training CD in Basic Methodology for Laboratory Mice. The CD illustrates the most common practices used in the NIH intramural research program and was developed to promote proficiency in performing common techniques in the mouse. It consists of eight training modules, table of contents, list of definitions and help and reference sections.

If you are interested in receiving a copy of this CD, please contact the **ACUC Office** for additional information.

Model Organisms for Biomedical Research

The NIH has developed the *Model Organisms for Biomedical Research* website to provide investigators with a central resource for information pertaining to various model organisms for use in biomedical research. This site can be found at **http://www.nih.gov/science/models/**

Alternatives-Thymectomy

A published study in 1959 by Drs. Russell and Burch proposed the use of the 3Rs (Replacement, Reduction, and Refinement) in animal related experiments to promote humane animal research. As required by **PHS Policy** and the **U.S. Government Principles**, investigators are required to consider alternatives in the design of their research studies. These alternative considerations include the **replacement** of animal models, the **reduction** in the number of animals used in experiments, and/or the **refinement** of procedures to eliminate or reduce unnecessary pain and distress. To promote the use of alternatives at the NCI-Frederick, this section has been designed to provide investigators with examples of how the 3Rs can be utilized in their own research projects.

Thymectomy is a surgical procedure to remove the thymus for a variety of experimental purposes. The traditional method involves using a suction device to remove the thymus. The **Animal Production Area** (APA) is using what would best be described as a refined technique, which is easier to learn and causes less mortality in the mice. The refined method involves grasping the thymus with forceps, gently manipulating the tissue and removing the thymus out of the chest cavity. This method also insures that you have removed the entire thymus. APA technicians regularly do thymectomies and are highly skilled. APA is willing to train individuals in their thymectomy technique. For training purposes or to purchase thymectomized mice from APA, please call 301-846-1203.